

**ABSTRACT**

The present invention provides methods and apparatus for the rapid and efficient collection and purification of activated monocytes. The methods and apparatus of the present invention provide means for effecting the collection and  
5 purification in an aseptic environment. The method involves filtering a blood component mixture through a monocyte-adhering filter; washing the blood component mixture; backflushing the filter with a physiological solution; and backflushing the filter with Dextran-40/serum albumin.